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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,298	07/10/2003	David Brault	84215-402 ADB	1617
23529	7590	01/24/2005	EXAMINER	
ADE & COMPANY 1700-360 MAIN STREET WINNIPEG, MB R3C3Z3 CANADA			GELLNER, JEFFREY L	
			ART UNIT	PAPER NUMBER
			3643	

DATE MAILED: 01/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/616,298

Applicant(s)

BRAULT ET AL.

Examiner

Jeffrey L. Gellner

Art Unit

3643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-25 and 27-29 is/are allowed.
- 6) ☒ Claim(s) 1, 4, 6-11, 13-20, 26, 30, 31, 35-37 and 42-45 is/are rejected.
- 7) ☒ Claim(s) 2, 3, 5, 12, 32-34 and 38-41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Note: The response/amendment received 15 November 2004 lacked a claim numbered 28 (see page 6 of response/amendment). Under 37 CFR 1.126 the claims have been renumbered with Applicant's claim 29 being claim 28, Applicant's claim 30 being claim 29, Applicant's claim 31 being claim 30, . . . Applicant's claim 46 being claim 45. Dependencies have been adjusted accordingly. In any further response to the instant office action Applicant is request to use the corrected claim numbers and to correct dependencies.

Also, Applicant is reminded of the requirement of MPEP 608.1 I - the text must have capital letters which are at least 0.21 com (0.08 inch) high.

Election/Restrictions

Applicant's election with traverse of Invention I (claims 1-17, 20-30, and 38-46) in the reply filed on 15 November 2004 is acknowledged. The traversal is on the ground(s) that the different uses for the subcombination are completely unreasonable (Remarks page 8 3rd para.). This is not found persuasive because under MPEP 806.05(d) the subcombinations must be disclosed as usable together and yet have separate usability. The examiner must supply an example of use which is not unreasonable. Here, the subcombinations are show as usable together in the drawings and the Examiner considers the different uses as reasonable because the structures could be used for the stated purposes, even if not probable.

The requirement is still deemed proper and is therefore made FINAL. Due to the amendment received 15 November 2004 along with the response to the restriction requirement, all claims are rejoined.

Specification

The disclosure is objected to because of the following informality:

On page 20, line 21, "plenum 58" should be --plenum 50--.

Appropriate correction is required.

Drawings

The drawings are objected to because:

The "heating coil 80" of page 22, line 12, of the Specification should be identified as element 80 in Fig. 2 so as to increase clarity of the Fig.

The "array of holes 102" of page 25, line 18, of the Specification which is shown in Fig. 2 is improper because of the arrow (see MPEP 608.02 V(r)).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the

Art Unit: 3643

drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 4, and 20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, 9, and 19 of copending Application No. 10/616,296. Although the conflicting claims are not identical, they are not patentably distinct from each other because each independent claim discloses a system for a greenhouse with a bench, or benches, each bench arranged to provide a support surface and an air handling system at least one air intake, a fan, an outlet duct, and a component for changing air temperature. Not disclosed is the air handling system with a air intake plenum mounted

Art Unit: 3643

underneath the bench and forming at least a part of a support for the bench. Sonoda et al., however, discloses an air handling system for a greenhouse with a plenum (4 of Fig. 2) that forms at least a part of a support for the bench(s) (in that connected to bench through 15 as shown in Fig. 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of 10/616,296 by placing a plenum under the bench(s) as disclosed by Sonoda et al. so as to conserve space in the greenhouse.

The dependent claims go to a horizontal bench top that is slidable.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Objections

Claims 1, are objected to because of the following informalities:

In claim 1, lines 10 and 12, the term “duct” should be --outlet duct-- to conform with the language of claim 1, line 9.

In claim 7, line 1, the term “duct” should be --outlet duct-- to conform with the language of claim 1, line 9.

In claim 20, lines 11 and 13, the term “duct” should be --outlet duct-- to conform with the language of claim 20, line 10.

In claims 21, 22, and 29, all line 1, the term “duct” should be --outlet duct-- to conform with the language of claim 20, line 10.

In claim 37, lines 10 and 12, the term “duct” should be --outlet duct-- to conform with the language of claim 37, line 9.

Art Unit: 3643

In claims 42, 43, all line 1, the term “duct” should be --outlet duct-- to conform with the language of claim 37, line 9.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11, 15, 26, and 18 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 11, line 2, the term “at least two inlets” is indefinite because it is unclear whether these inlets are the same as the “at least one air intake” of claim 1, line 7, or different intakes/inlets.

In claim 15, line 2, the term “two inlets” is indefinite because it is unclear whether these inlets are the same as the “at least one air intake” of claim 1, line 7, or different intakes/inlets.

In claim 26, line 2, the term “two inlets” is indefinite because it is unclear whether these inlets are the same as the “at least one air intake” of claim 20, line 8, or different intakes/inlets.

In claim 18, line 14 and 15, the term “two inlets” and “inlets” is indefinite because it is unclear whether these inlets are the same as the “at least one air intake” of claim 37, line 7, or different intakes/inlets.

Claim Rejections - 35 USC §103

The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6-10, 13-17, 44, 19, 30, 31, 35, 36 are rejected under 35 U.S.C. §103(a) as being unpatentable over Takano (JP2000-69858) in view of Sonoda et al. (JP4-16131).

As to Claim 1, Takano discloses a climate control system for use with a greenhouse (Figs. 1, 2, and 4) having an exterior wall of transparent panels comprising a bench (best shown in Fig. 4) arranged to provide a support surface; and, an air handling system (shown in Figs. 1 and 2) comprising an air intake plenum (7 and 8 of Fig. 1) having at least one air intake (8a of Figs. 1 and 2), a fan (6 of Fig. 1) connected to the plenum, an outlet duct (generally around 10 of Fig. 1) connected to the fan having an air outlet (11 of Fig. 1) from the outlet duct into the interior of the greenhouse, and at least one air conditioning component (9 of Figs. 1 and 2) for conditioning the air transported from the plenum to the outlet duct by the fan, the plenum including at least a part thereof mounted underneath the bench (Figs. 1 and 4). Not disclosed is the plenum forming at least a part of a support for the bench. Sonoda et al., however, disclose a plenum mounted underneath a bench and forming at least a part of a support for the bench (4 and 15 of Fig. 2 in that 15 is connected to the bench through 15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Takano by having the plenum forming at least a part of a support for the bench as disclosed by Sonoda et al. so as to get the plenum off the ground so as to allow for easier cleaning/maintenance.

As to Claim 6, Takano as modified by Sonoda et al. further disclose the outlet duct including a vertical duct section at one end of the bench (region above 6 in Fig. 1 of Takano).

As to Claim 7, Takano as modified by Sonoda et al. further disclose a horizontal discharge duct section and extending over the bench (Fig. 2 of Takano).

As to Claim 8, the limitations of Claim 1 are disclosed as described above. Further disclosed is the tube flexible (Fig. 1 of Sonoda et al.). Not disclosed is the tube shaped to form an elliptical cross section that is wider than it is high. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system of Takano as modified by Sonoda et al. by having the tube shaped to form an elliptical cross section that is wider than it is high depending upon cost and availability of tubing.

As to Claims 9 and 10, the limitations of Claim 1 are disclosed as described above. Not disclosed is a heating or cooling coil in the plenum underneath the bench. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system of Takano as modified by Sonoda et al. by having a heating or cooling coil in the plenum underneath the bench so as to moderate the temperature in the greenhouse so as to optimize plant growth.

As to Claim 13, Takano as modified by Sonoda et al. further disclose a fan in a housing at the end of the bench (5 of Fig. 1 of Sonoda et al.).

As to Claim 14, Takano as modified by Sonoda et al. further disclose a air flow connection arranged in communication with a sidewall (Fig. 1 of Takano).

As to Claim 15, the limitations of Claim 1 are disclosed as described above. Further disclosed are two inlets (8a of Fig. 2 of Takano). Not disclosed is one at each side and at the

Art Unit: 3643

end. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the system of Takano as modified by Sonoda et al. by having inlets, one at each side and at the end so as to meet a particular grower/plant species need.

As to Claim 16, Takano as modified by Sonoda et al. further disclose a fogging nozzle (17 of Fig. 2 of Sonoda et al.) in the plenum underneath the bench.

As to Claim 17, Takano as modified by Sonoda et al. further disclose the water under pressure, pump, and a control system (inherent in Sonoda et al.).

As to Claim 44, the limitations of Claim 37 are disclosed as described below. Not disclosed is the tube flexible and shaped to form an elliptical cross section that is wider than it is high. Sonoda et al., however, disclose a flexible tube (6 of Fig. 1) for a greenhouse air system. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Takano by having a flexible tube as disclosed by Sonoda et al. so as meet the needs of the space in the greenhouse and by having the tube shaped to form an elliptical cross section that is wider than it is high depending upon cost and availability of tubing.

As to Claim 19, Takano as modified by Sonoda et al. further disclose a fogging nozzle (17 of Fig. 2 of Sonoda et al.) in the plenum underneath the bench and the water under pressure, pump, and a control system (inherent in Sonoda et al.).

As to Claim 30, Takano as modified by Sonoda et al. further disclose a fan in a housing at the end of the bench (5 of Fig. 1 of Sonoda et al.) and the fan housing having a connection for exterior air arranged to extend through the one exterior wall (Fig. 1 of Sonoda et al.).

As to Claim 31, Takano as modified by Sonoda et al. further disclose the plenum mounted underneath the bench (4 and 15 of Fig. 2 of Sonoda et al.) and at least a part of the support therefor ((4 and 15 of Fig. 2 in that 15 is connected to the bench though 15).

As to Claim 35, Takano as modified by Sonoda et al. further disclose the outlet duct including a vertical duct section at one end of the bench (region above 6 in Fig. 1 of Takano).

As to Claim 36, Takano as modified by Sonoda et al. further disclose a horizontal discharge duct section and extending over the bench (Fig. 2 of Takano).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 37, 42, 43, and 45 are rejected under 35 U.S.C. §102(b) as being anticipated by Takano (JP2000-69858).

As to Claim 37, As to Claim 1, Takano discloses a climate control system for use with a greenhouse (Figs. 1,2, and 4) having an exterior wall of transparent panels comprising a bench (best shown in Fig. 4) arranged to provide a support surface; and, an air handling system (shown in Figs. 1 and 2) comprising an air intake plenum (7 and 8 of Fig. 1) having at least one air intake (8a of Figs. 1 and 2), a fan (6 of Fig. 1) connected to the plenum, an outlet duct (generally around 10 of Fig. 1) connected to the fan having an air outlet (11 of Fig. 1) from the outlet duct into the interior of the greenhouse, and at least one air conditioning component (9 of Figs. 1 and 2) for

Art Unit: 3643

conditioning the air transported from the plenum to the outlet duct by the fan, the plenum including at least a part thereof mounted underneath the bench (Figs. 1 and 4) and the outlet duct (including at least a portion of it above the bench (Fig. 1) for discharge of the conditioned air downwardly onto the bench.

As to Claim 42, Takano further discloses a vertical duct section (region above 6 in Fig. 1)

As to Claim 43, Takano further discloses horizontal discharge duct (region near 13 of Fig. 1) connected to the vertical duct section (Fig. 1) extending over the bench for discharging.

As to Claim 45, Takano further discloses an air flow connection which communicates with a sidewall (12 of Fig. 1).

Allowable Subject Matter

Excluding the rejections based upon double patenting:

Claims 2-5, 11, 12, 38-41, and 32-34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 20-25, 27-29 are allowed over the art or record.

Claim 26 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claim 18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Spoomaker and Lewis et al. disclose in the prior art various ventilation systems. JP2003-219736 and JP10-52175 disclose in the prior art various greenhouses with ventilation under the bench. Both disclose in the prior art information of greenhouses.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Jeffrey L. Gellner whose phone number is 703.305.0053. The Examiner can normally be reached Monday through Thursday from 8:30 am to 4:00 pm. The Examiner can also be reached on alternate Fridays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Peter Poon, can be reached at 703.308.2574. The official fax telephone number for the Technology Center where this application or proceeding is assigned is 703.872.9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.308.1113.



Jeffrey L. Gellner
Primary Examiner